

REMARKS

This application has been reviewed in light of the Office Action dated May 8, 2002. Claims 1, 4-7, 10, 13-15, 18, and 30-37 are presented for examination, of which Claims 1 and 18 are in independent form. Claims 2, 3, 8, 9, 11, 12, 16, 17, and 19-29 have been cancelled, without prejudice or disclaimer of the subject matter presented therein. Claims 1, 4-7, 10, 13-15, and 18 have been amended to define more clearly what Applicants regard as their invention. New Claims 30-37 have been added to provide Applicants with a more complete scope of protection. Favorable reconsideration is requested.

The Office Action states that the title of the invention is not descriptive. The title has been amended to read as follows: --METHOD AND APPARATUS FOR TRANSMITTING PACKETS AT A TRANSFER RATE THAT DEPENDS ON A RESPONSE FROM A DESTINATION--. Applicants respectfully submit that the title, as amended, is clearly indicative of the invention to which the claims are directed.

Claim 2 was objected to for certain informalities. Cancellation of Claim 2 renders the objection moot.

Claims 4 and 12-14 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Applicants have reviewed and amended Claims 4, 13, and 14, as deemed necessary, with special attention to the points raised in section 3 of the Office Action. It is believed that amended Claims 4, 13, and 14 are sufficiently definite and, therefore, withdrawal of the rejections is respectfully requested.

The Office Action rejected Claims 1-5, 11, 12, 15, and 16 under 35

U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,632,016 (Hoch et al.). Claims 18-22 and 27-29 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,038,216 (Packer). Claims 6-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hoch et al. in view of U.S. Patent No. 5,706,439 (Parker). Claims 24 and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Packer in view of U.S. Patent No. 5,459,725 (Bodner et al.). Claim 26 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Packer in view of U.S. Patent No. 5,751,967 (Raab et al.). Cancellation of Claims 2, 3, 8, 9, 11, 12, 16, 17, and 19-29 renders their rejections moot. Applicants submit that independent Claims 1 and 18, together with the claims dependent thereon, are patentably distinct from the cited prior art for at least the following reasons.

The aspect of the present invention set forth in Claim 1 is directed to an apparatus that has different transfer rates. The apparatus includes a communication unit and a control unit. The communication unit transmits a predetermined packet to destinations at a predetermined transfer rate. The control unit discriminates a maximum transfer rate between the apparatus and the destinations, based on a response transmitted from each of the destinations.

Claim 18 is a method claim corresponding to Claim 1.

Hoch et al., as understood by Applicants, relates to a serial bus that operates at multiple transmission rates. Apparently, Hoch et al. teaches that the serial bus automatically generates data response packets for return to a requesting node. The speed at which a data request packet was transmitted is used for retransmitting the requested data back to the source node requesting the data.

Packer, as understood by Applicants, relates to a system for data-rate control in packet communications. Apparently, Packer teaches that latency is added to an acknowledgment (ACK) packet and, by adjusting the size of a flow-control window associated with the packet, the data rate of source data is controlled at the station originating the packet.

Nothing has been found in either Hoch et al. or Packer that is believed to teach or suggest an apparatus that includes "a communication unit adapted to transmit a predetermined packet to destinations at a predetermined transfer rate" and "a control unit adapted to discriminate a maximum transfer rate between the apparatus and the destinations, based on a response transmitted from each of the destinations," as recited in Claim 1. A similar argument may be made for the method of Claim 18.

Applicants submit that both Hoch et al. and Packer deal with transmission between one source and *one* destination, and neither reference is understood to disclose or suggest an apparatus that transmits a packet to more than one destination, and that discriminates a maximum transfer rate based on a response transmitted from each of the destinations, as claimed in Claims 1 and 18.

Accordingly, Applicants submit that both Claim 1 and Claim 18 are not anticipated by either Hoch et al. or Packer, and respectfully request withdrawal of the rejections under 35 U.S.C. § 102(b) and (e).


The other claims in this application depend from one or another of the independent claims discussed above, and, therefore, are submitted to be patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the

invention, individual consideration or reconsideration, as the case may be, of the patentability of each claim on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,


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VERSION WITH MARKINGS TO SHOW CHANGES MADE TO CLAIMS

1. (Amended) [A data communication] An apparatus having different transfer rates, the apparatus comprising:

a) [transmission means for transmitting a predetermined packet to at least a destination, wherein said predetermined packet is transmitted at a predetermined transfer rate] a communication unit adapted to transmit a predetermined packet to destinations at a predetermined transfer rate; and

b) [discrimination means for discriminating a maximum transfer rate to said destination, according to a response to said predetermined packet] a control unit adapted to discriminate a maximum transfer rate between the apparatus and the destinations, based on a response transmitted from each of the destinations.

Claims 2 and 3 have been canceled.

4. (Amended) [A data communication] An apparatus according to claim 1,
wherein [said transmission means retransmit said predetermined packet at a transfer rate lower than said predetermined transfer rate, according to the presence or absence of the response to said predetermined packet] the communication unit retransmits the predetermined packet at a transfer rate lower than the predetermined transfer rate, if at least one response is absent.

5. (Amended) [A data communication] An apparatus according to claim 1, wherein [said transmission means transmits predetermined information data at said maximum transfer rate after discriminating the maximum transfer rate to said destination] the communication unit transmits data to the destinations at the maximum transfer rate after discriminating the maximum transfer rate.

6. (Amended) [A data communication] An apparatus according to claim 5, wherein [said transmission means divides said predetermined information data into one or more segment data, to generate one or more data packets from each segment data, and transfers the data packet in succession] the communication unit packetizes the data into at least one packet and broadcasts each packet to the destinations.

7. (Amended) [A data communication] An apparatus according to claim 6, wherein [said transmission means executes asynchronous transfer of said plural data packets] an amount of data packetized in each packet is variable, based on the maximum transfer rate.

Claims 8 and 9 have been canceled.

10. (Amended) [A data communication] An apparatus according to claim [6] 1, wherein [said transmission means is a digital interface based on the] the communication unit conform to an IEEE 1394 standard.

Claims 11 and 12 have been canceled.

13. (Amended) [A data communication] An apparatus according to claim 1, wherein [said discrimination means identifies said predetermined transfer rate as the maximum transfer rate, according to the presence or absence of the response from the destinations] the predetermined packet includes a command that inquires of an ability of the destinations.

14. (Amended) [A data communication] An apparatus according to claim [13] 1, wherein [said discrimination means identifies said predetermined transfer rate as the maximum transfer rate, in case all the responses from the destinations can be received within a predetermined period] the predetermined packet includes information about an ability of the apparatus.

15. (Amended) [A data communication] An apparatus according to claim 1, wherein [said] the predetermined packet includes [at least one of dummy data, a command inquiring the ability of said destination, ability of said source, a channel number assigned to said information data, and] a connection ID [indicating the] that indicates a logical connection relationship between [said source and said destination] the apparatus and the destinations.

Claims 16 and 17 have been canceled.

18. (Amended) A [data communication method] method for an apparatus having different transfer rates, comprising the steps of:

- a) transmitting a predetermined packet to [at least a destination, wherein said predetermined packet is transmitted] destinations at a predetermined transfer rate; and
- b) discriminating a maximum transfer rate [to said destination, according to a response to said predetermined packet]. between the apparatus and the destinations, based on a response transmitted from each of the destinations.

Claims 19-29 have been canceled.